


“The Value - Brand Trust - Brand Loyalty Chain: An Analysis of Some Moderating Variables”

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THE VALUE – BRAND TRUST – BRAND LOYALTY CHAIN: AN ANALYSIS OF SOME MODERATING VARIABLES

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Abstract

Trust has been recognized as an important factor that strongly influences customer loyalty. However, there has been little empirical research into brand trust in the marketing literature. In this study we investigate the moderating effect of some consumer characteristics on the value – brand trust – brand loyalty chain. The empirical findings, which are based on multiple-group causal analysis, show that the strength of the relationship between hedonic value and brand trust and brand trust and brand loyalty is strongly influenced by consumer involvement, price consciousness, and brand consciousness.

Introduction

Brand trust and brand loyalty are central aspects in brand management (Chaudhuri and Holbrook, 2001). It has been shown that brands are valuable intangible assets (Rao et al., 2004; Srivastava et al., 1998). Building a strong brand with loyal customers is of strategic importance for marketing managers because it provides substantial competitive and economic benefits to a firm, such as less vulnerability to competitive marketing actions, reduced marketing costs, higher rates of return on investment through increases in market shares, better cooperation with intermediaries, favorable word of mouth and greater extension opportunities (Delgado-Ballester and Munuera-Aleman, 2005; Gounaris and Stathakopolous, 2004; Chaudhuri and Holbrook, 2001; Homburg and Giering, 2001; Dick and Basu, 1994). Hence, there is great interest in how brand loyalty is built and which factors drive brand loyalty and brand performance.

In this context, brand trust is of crucial importance. Trust has to be considered as the corner stone and as one of the most desirable qualities in the relationship both between a company and its customers and in the relationship between a brand and its consumers. The focus on brand trust is based on findings that there is a strong positive relationship between brand trust and brand loyalty (Chaudhuri and Holbrook, 2001). The objective of this study is to provide additional insight into the product value – brand trust – brand loyalty chain by examining the effects of moderating variables on these relationships. More specifically, we investigate both the link between hedonic and utilitarian value of a product and brand trust and the link between brand trust and attitudinal and purchase loyalty and the impact of selected customer characteristics on these relationships in the context of four product groups (mobile phones, sunglasses, running shoes, and jeans) that can be characterized as consumer durables with high brand relevance (Fischer et al., 2004).

After reviewing the literature on brand trust, hedonic and utilitarian value as selected contributors to brand trust and brand loyalty as an important outcome of trust, we introduce some possible moderator variables and present the basic research model. Subsequently, the research method and results are described. Finally, we discuss the findings of this study in terms of their implications for managerial practice and point out some directions for further research.

Literature review and hypothesized main effects

Although the importance of brand trust has been theoretically emphasized in the branding literature (Ambler, 1997; Sheth and Parvathy, 1995) there has been little empirical research into it (Delgado-Ballester and Munuera-Aleman, 2005). It can be assumed that the difficulty in conceptu-

alizing and measuring the construct of brand trust is one of the reasons for the lack of empirical research. Synthesizing different definitions of trust across various research disciplines it can be concluded that confident expectations or willingness to rely as well as uncertainty and risk are critical components of most trust definitions (Grabner-Kräuter and Kaluscha, 2003). In the branding literature, the concept of brand trust is based on the idea of a brand-consumer relationship, which is seen as a substitute for human contact between the company and its customers (Sheth and Parvathy, 1995). Chaudhuri and Holbrook (2001) define brand trust as “the willingness of the average consumer to rely on the ability of the brand to perform its stated function” (p. 82). Across disciplines there is also agreement that trust only exists in an uncertain and risky environment. Trust is only relevant in a risky situation (Mayer et al. 1995), when the outcomes of a certain decision are uncertain and important for the individual.

Drawing on conceptualizations of trust in the social psychology literature (e.g. Lewis and Weigert, 1985) many researchers differentiate cognitive and affective/emotional trust. Cognitive trust is based on “good rational reasons why the object of trust merits trust” (Lewis and Weigert, 1985, p. 972). It is thus based on evaluating the competence, reliability, and predictability of the trusted object and reflects the economic understanding of trust as a rational choice (Riegelsberger et al., 2005; Johnson and Grayson, 2003). Affective trust, on the other hand, is the emotion-driven form of trust that is based on immediate affective reactions, on attractiveness, aesthetics, and signals of benevolence. Frequently trust-based behavior results from a mix of affective and cognitive trust (Riegelsberger et al., 2005; Corritore et al., 2003).

In this study we focus on the hedonic and utilitarian value of products as drivers of brand trust. In the consumer research literature, it has been suggested that consumer evaluation of a consumption object is placed on both a utilitarian dimension of instrumentality (e.g. how useful and beneficial the product is), and on a hedonic dimension measuring the experiential affect associated with the product (e.g. how pleasant and agreeable these associated feelings are) (Batra and Ahtola, 1990; Mano and Oliver, 1993). The concept of hedonic value reflects the experiential paradigm in consumer behavior theory, which – in contrast to the information-processing paradigm – pursues the more subjective, emotional, aesthetic and symbolic aspects of consumption (Holbrook and Hirschmann, 1982; Mano and Oliver, 1993; Chaudhuri and Holbrook, 2001). Chaudhuri and Holbrook (2001) define hedonic value as the pleasure potential of a product, whereas utilitarian value is conceptualized as the ability of a product to perform functions in the everyday life of a consumer. Both aspects of utilitarian and hedonic value contribute, in different degrees, to the overall evaluation of a consumer good or behavior. Concerning the relationship between product value and brand trust it can be assumed that cognitive trust toward a specific brand is greater when the utilitarian value of the product in terms of e.g. quality or convenience is high (Chaudhuri and Holbrook, 2001). On the other hand, products with a high pleasure potential provide nontangible, symbolic benefits and are likely to hold a greater potential for evoking positive emotions and affect-based brand trust in a consumer.

Following the above discussion, and assuming that brand trust is based both on cognitive and affective reasons and reactions, we hypothesize that:

H1: Utilitarian value and hedonic value are positively related to brand trust.

Concerning the consequences of trust, Morgan and Hunt (1994) consider trust as key factor of any long-term relationship. If a person trusts another party it is likely that she/he will develop some form of positive behavioral intention towards the other party (Lau and Lee, 1999). Brand loyalty as an important consequence of brand trust has been conceptualized either as a behavioral intention towards the brand or as actual pattern of purchase behavior, or both. From a behavioral perspective brand loyalty is conceptualized in terms of repeated purchases. Additionally, the attitudinal perspective looks at the reasons behind this behavior and conceives brand loyalty based on stated preferences, commitment, or purchase intentions (Gounaris and Stathakopoulous, 2004). Drawing on the commitment-trust theory of relationship marketing (Morgan and Hunt, 1994) and brand commitment (e.g. Fournier, 1998; Gundlach et al., 1995), Chaudhuri and Holbrook propose a

strong impact of brand trust on attitudinal and repurchase loyalty. Brand trust leads to higher levels of loyalty as trust creates exchange relationships that are highly valued (Morgan and Hunt, 1994).

Hence, based on the theory of brand commitment and brand loyalty respectively in the relationship marketing literature we propose that

H2: Brand trust is positively related to attitudinal and purchase loyalty.

Moderators of the relationship between value and brand trust and brand loyalty

Drawing on the marketing literature related to personal determinants of consumer behaviour, personal characteristics are supposed to have a moderating effect on the link between product value and brand trust as well as on the link between brand trust and brand loyalty. Two demographic and three psychographic characteristics were chosen as potential moderators.

Gender and age

Demographic characteristics that have been found to influence an individual's purchase intention and behavior in a number of different contexts are gender and age. Compared to men, women are more involved in purchasing activities (Slama and Tashlian, 1985). Johnson-George and Swap (1982) found that men and women look for different attributes in another person when assessing her or his trustworthiness. Drawing on findings in the personality and social psychology literature, Chen and Dhillon (2003) propose that both age and gender significantly influence the perception of competence, integrity and benevolence of an Internet vendor, and thus consumer trust in e-commerce. Hence, we suggest age and gender to be moderators of the relationships between value, brand trust, and brand loyalty. For example, older people might have more experience in buying consumer durables as a personal source of information which might result in a stronger effect of brand trust on both attitudinal and purchase loyalty. As women are more involved in purchasing activities than men – what will lead to higher interest in and search of product-related information – one might predict that the impact of brand trust on brand loyalty might be stronger for women. In predicting possible gender differences in intention and behavior relationships in the context of technology adoption, Venkatesh et al. (2000) propose that women's behavior will be more "considered" and less "automatic" than that of men. Referring to their arguments we expect that deliberated cognitions (encompassing evaluations of utilitarian product value) will play a greater role in the formation of brand trust among women, and the resulting trusting intention will be more important in shaping their future purchase behavior.

Involvement

The involvement construct has played an increasingly important role in analyzing and explaining consumer behavior. The level of consumer involvement is a crucial factor influencing buying decisions and is discussed by both attitudinal and behavioral theorists when addressing the issue of brand loyalty (see e.g. the literature in Bennett et al., 2005). Although there is no universally accepted precise definition of involvement, most researchers agree that the level of involvement is related to the level of perceived personal relevance of a certain product for the consumer (e.g. Homburg and Giering, 2001; Knox et al., 1994). Kapferer and Laurent (1993) conceptualize consumer involvement as a multidimensional construct consisting of five determinants: (1) personal meaning and self-reference, (2) ability to provide pleasure, (3) ability to express the person's self, (4) perceived importance of negative consequences, which means the perceived importance of purchase risk and (5) perceived probability of purchase risk. To sum up, the level of involvement indicates how important a product and the consequences of its purchase are for the individual. Hence, involvement is suggested to moderate the relationships between product value, brand trust, and brand loyalty. For example, individuals with high product or enduring involvement might perceive a greater pleasure potential of the product, and therefore the influence of hedonic value on brand trust might be more dominant than for lowly involved persons.

Price consciousness

Whereas Zeithaml (1984) used the term in a wider sense referring to different price-related cognitions, Lichtenstein et al. (1993) were the first authors to conceptualize the construct of price consciousness in a narrower sense as “the degree to which the consumer focuses exclusively on paying low prices” (Lichtenstein et al., 1993, p. 235). They point out that their definition is consistent with the conceptualization of several other authors (e.g. Tellis and Gaeth, 1990; Lichtenstein, Block and Black, 1988; Erickson and Johansson, 1985; Monroe and Petroshius, 1981, cited by Lichtenstein et al., 1993). Sinha and Batra (1999) refer to the unwillingness of consumers to pay a higher price for a product and are in line with Monroe and Petroshius (1981), who conceptualize price consciousness as individual differing reluctance to pay for additional or distinguishing features of a product, if the price difference is too large. Miyazaki et al (2000) define price consciousness as individual difference variable reflecting the “enduring motivation to consider unit price information” (p. 98). Price consciousness is among a variety of other psychological constructs explaining price perception of consumers in the marketplace. As “price is unquestionable one of the most important marketplace cues” (Lichtenstein et al., 1993), it plays two different roles in influencing purchase probabilities: a negative role as it means giving a certain amount of money in exchange for goods and services, but also a positive role as higher prices are cues for higher quality (Sternquist, Byun and Jin, 2004; Lichtenstein et al., 1993; Lichtenstein et al., 1988; Erickson and Johansson, 1985). Price consciousness is one of the five constructs consistent with the negative role of price – the others are value consciousness, price mavensim, sale proneness and coupon proneness (Lichtenstein et al., 1993). Price consciousness has been increasing in awareness of the consumers in the last few years. One of the reasons is that consumers focus on cheaper products in order to sustain their standard of living (Rothenberger, 2005; Simon, 2004). Price consciousness is a crucial factor influencing purchase behavior. Highly price-conscious consumers express lower perceptions of offer value and higher price information search intentions (Alford and Biswas, 2002). According to Alford and Bsiwas (2002) highly price conscious consumers derive emotional value from looking for even lower prices. They get rewarded if lower prices have been found and are proud of their “success”. The consumers’ level of price consciousness therefore influences the propensity to search for prices (Urbany, Dickson and Kalapurakal, 1996), the sensitivity of price-oriented sales promotions (e.g. Lichtenstein et al., 1997; Blattberg and Neslin, 1990; Lichtenstein et al., 1990), the propensity to redeem coupons in different product categories (Swaminathan and Bawa, 2005) and the knowledge of unit prices as they are vigilant in paying lower prices and therefore motivated to process pricing information (Manning et al., 2003; Miyazaki et al., 2000).

In our study the interest has been focused on the variation across consumers, not on differing between product categories. Sinha and Batra (1999) demonstrated that consumers are less price-conscious in buying products in categories with high perceived risk. As loyalty is one strategy of risk reduction, price consciousness may moderate the value – brand trust – brand loyalty chain. It is assumed that price consciousness weakens the influence of hedonic value to trust and strengthens the path from trust to attitudinal and purchase loyalty. As mentioned above, highly price conscious consumers gain emotional reward from looking for even lower prices and are motivated to search for additional information and therefore elaborate their purchase decision instead of relying on a known brand. Hence, trust becomes an important missing link between hedonic value and loyalty for highly price conscious consumers as it reduces their reluctance to be loyal. The path between hedonic value and trust is assumed to be stronger for less price conscious consumers. For highly price conscious consumers instead, a low price has a higher emotional value than the hedonic value of a product. Hence, trust may have other, more important antecedents than hedonic value of the brand for highly price conscious consumers.

Brand consciousness

Nelson and McLeod (2005) do not differ conceptually between brand consciousness and brand sensitivity. According to these authors, these constructs have been studied to manage brands (Kapferer and Laurent, 1985), to understand consumer socialization processes (LaChance et al.,

2003; Shim et al., 1995) and to investigate the different feelings of consumers against imitation of brands (d'Astous and Gargouri, 2001). Brand consciousness is – similar to price consciousness – an individual difference variable. “Some individuals are particularly attuned or conscious of brands in general and this consumer style impacts how likely they attend to and think favourably of brand names in others contexts [...]” (Nelson and McLeod, p. 518). Sproles (1985) and Sproles and Kendall (1986) were the first researchers who developed a sophisticated methodology for measuring consistent shopping orientations and shopping behaviour, the Consumer Styles Inventory (CSI). A consumer decision-making style is “a mental orientation characterising a consumer’s approach to making choices” (Sproles and Kendall 1986, p. 267). Similar to the conceptualization of personality by psychologists, it is assumed that consumers develop a shopping personality (Bakewell and Mitchell, 2003; Lysonski et al., 1996; Sproles and Kendall, 1986). Sproles and Kendall (1986) have conceptualized eight consumer decision-making styles, namely price/value consciousness, perfectionism, novelty/fashion consciousness, habitual/brand-loyal, recreational shopping consciousness, impulsive/careless, confused by overchoice and brand consciousness. Highly brand conscious consumers are concerned with getting expensive, well-known brands (Bakewell and Mitchell, 2003). They believe, that a higher price is related to a higher quality of a product. They tend to prefer best selling advertised brands. Walsh et al. (2001) could not confirm the U.S. eight factor model completely, but they found six factors for German shoppers: Brand Consciousness, Perfectionism, Recreational/Hedonism, Confused by Overchoice, Impulsiveness and Novelty-Fashion Consciousness. They found an additional factor related to variety seeking, which replaced brand loyalty and price/value consciousness. Therefore, in our study testing Austrian shoppers price consciousness was not measured with the CSI. Due to high validity of the German Consumer Decision-Making Styles (Walsh et al., 2001; Walsh and Hennig-Thurau, 2001) brand consciousness was measured with items from this form of the CSI. Lysonski et al. (1996) found three factors to be the most stable in their study comparing consumers in four countries, brand consciousness being one of them. Walsh et al. (2001) argue that German consumers link brand consciousness and price consciousness in a way that brand conscious consumers are relatively indifferent to price. Taking this argument into account, it is proposed that brand consciousness moderates the value – trust – loyalty chain in the following way: With highly brand conscious consumers, hedonic value should have a greater effect on trust and utilitarian value should have a smaller impact on trust. Additionally, high brand consciousness should weaken the impact of trust on attitudinal and purchase loyalty. Hence, brand consciousness and price consciousness should have diametrically opposed effects in the value – trust – loyalty chain.

Study

A standardized self-administered questionnaire was developed to test the proposed relationships for four products (mobile phones, sunglasses, running shoes, and blue jeans). Subjects for the study were randomly selected people that have been approached during shopping hours in shopping streets of two Austrian cities. Data collection took place between 9 a.m. and 7 p.m. on five working days. The interviewers randomly selected passers-by, asked them to participate in the study (if they owned one of the four products) and to complete the standardized, self-administered questionnaire. As an incentive, interviewees received a chocolate bar. Overall, 618 usable questionnaires were collected (mobile phones N = 146, blue jeans N = 173, sunglasses N = 141, running shoes N = 158). Missing data (less than 10 percent) have been imputed with the norm procedure (Schafer and Graham, 2002; Wirtz, 2004). Table 1 displays the characteristics of the sample.

Table 1

Characteristics of the sample

Characteristic		%
Gender	Male	43.9
	Female	56.1
Age	18-24 years	39.6
	25-34 years	22.4
	35-44 years	18.8
	45 and older	19.1
Education	Primary	9.5
	High school	37.5
	Vocational school	39.2
	University	13.6
	Other	.2

Measures

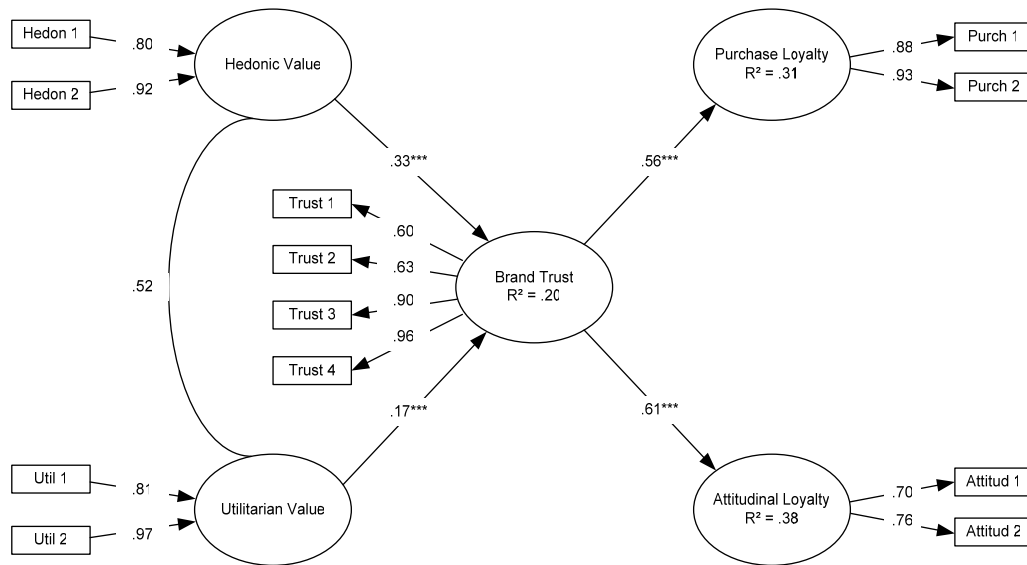
Brand trust, utilitarian value, hedonic value, purchase loyalty, and attitudinal loyalty were measured using the scales developed by Chaudhuri and Holbrook (2001). Involvement was measured with 16 items from the Consumer-Involvement-Profile-Scale (CIP) by Kapferer and Laurent (1985). The items were adapted to brand involvement. The items to measure brand consciousness were taken from the German Consumer-Decision Making Styles by Walsh and Hennig-Thurau (2001), and price consciousness was measured with the scale developed by Lichtenstein et al. (1988). All statements were measured on a 5-point Likert scale (1= strongly disagree, 5=strongly agree).

Results

The proposed relationships have been tested using structural equation modelling with AMOS 5.0. In the following sections, we first report the main effect model, and then the impact of the moderators is presented.

Main effect model

The fit indices, standardized path coefficients, and explained variance are reported in Figure 1. The chi-square value is 190.606 ($df = 47$, $p = .000$; $\chi^2/d.f. = 4.055$). Chi-square, however, is only recommended with moderate samples (Hu and Bentler, 1999), e.g. 100 to 200 (Tabachnik and Fidell, 1996), as with larger sample sizes, as in this case, trivial differences become significant. Hence, other global fit indices are used to test model fit. All other fit indices show good model fit: The root mean square error of approximation (RMSEA) is .070, the goodness-of-fit index (GFI) is .950, the adjusted goodness-of-fit index (AGFI) is .917, the Tucker-Lewis index (TLI) is .955 and the comparative fit index (CFI) is .968. Thus, it can be concluded that the model fits the data reasonably well.



Notes: $\chi^2 = 190.606$, $DF = 47$, $p = .000$, $\chi^2/DF = 4.055$, $AGFI = .917$, $GFI = .950$, $CFI = .968$, $TLI = .955$, $RMSEA = .070$
 *** $p < .001$

Fig.1. The Value – Brand Trust – Brand Loyalty Chain (Main effect model)

In order to evaluate the local fit of the structural components, reliability and validity of the measures were tested calculating the composite reliability (CR) of the constructs, the average variance extracted (AVE) (Fornell and Larcker, 1981), and the Fornell-Larcker-Ratio (1981) to test discriminant validity. The results are reported in Table 2, showing very good psychometric properties of the measures. All indicator loadings are above .6, composite reliability is for every construct above .7, average variance extracted is above .5 and the Fornell-Larcker-Ratio is below 1 for each construct.

Table 2

Psychometric properties of the scales

Construct	Item	Indicator Loading	Composite Reliability	Average Variance Extracted	Fornell-Larcker-Ratio
Hedonic Value	"I love this product"	.80	.85	.74	.37
	"I feel good when I use this product"	.92			
Utilitarian Value	"I rely on this product"	.81	.89	.80	.34
	"This product is a necessity for me"	.97			
Brand Trust	"I trust this brand"	.60	.87	.64	.58
	"I rely on this brand"	.63			
	"This is an honest brand"	.90			
	"This brand is safe"	.96			
Purchase Loyalty	"I will buy this brand the next time I such a product"	.88	.90	.82	.48
	"I intend to keep purchasing this brand"	.93			
Attitudinal Loyalty	"I am committed to this brand"	.70	.70	.54	.74
	"I would be willing to pay a higher price for this brand over other brands"	.76			

As Figure 1 shows, all proposed main effects are highly significant. Hedonic value and utilitarian value influence brand trust, explaining 20% of its variance. Brand trust leads to purchase loyalty ($R^2 = .31$) and attitudinal loyalty ($R^2 = .38$).

Test of moderating effects

In the second phase of the analysis, the moderator effects were estimated. Moderator effects can be evaluated using moderated regression analysis (e.g. Baron and Kenny, 1986) and multiple-group analysis (e.g. Homburg and Giering, 2001). As multiple-group analysis is considered to be a more appropriate method when relationships among latent constructs are considered (Homburg et al., 2001), we applied multiple-group analysis.

To perform the multiple-group analysis for each moderator variable (brand consciousness, price consciousness, involvement, sex, and age) two subsamples were created. In order to build the subgroups, summed scores of the latent variables brand consciousness, price consciousness and involvement were calculated. For involvement, twelve items were added up (Cronbach's Alpha .816), for price consciousness and brand three items in each case (Cronbach's Alpha .743, and .673 respectively). The subsamples (high and low for each construct) were created based on the median to split the groups. The age groups were built as follows: respondents up to 35 years (low) and respondents older than 35 years (high).

For each moderator variable multigroup analysis was performed comparing the two subsamples. In the first step of the moderator analysis, an overall χ^2 -difference test for each of the moderator variables was conducted. Two models – one that imposes equality constraints on the independent variables across the subgroups and a more general model that allows all parameters to vary freely across the subgroups – were compared. The results are reported in Table 3. The null hypothesis which assumes that the moderator variables do not have any effect on the relationship between the constructs in the main effect model can be rejected in four cases (brand consciousness, involvement, price consciousness, gender) as the $\Delta\chi^2$, for all parameters set equal across subgroups is significant. In the case of age no significant χ^2 -difference was found, indicating that age is not moderator. Table 3 also reports the χ^2 -difference for each relationship analyzed.

Price consciousness influences the relationship between hedonic value and brand trust and the relationship between brand trust and attitudinal loyalty. The analysis shows that hedonic value is more important to form brand trust when price consciousness is low ($\Delta\chi^2 = 7.818^{**}$). Furthermore, brand trust has a stronger influence on attitudinal loyalty when price consciousness is high ($\Delta\chi^2 = 6.676^{**}$).

Involvement moderates the relationship between hedonic value and brand trust ($\Delta\chi^2 = 19.056^{***}$). The higher the consumer's involvement is, the stronger the link between hedonic value and brand trust is.

Brand consciousness influences the link between utilitarian value and brand trust ($\Delta\chi^2 = 5.191^{**}$) and the link between brand trust and attitudinal loyalty ($\Delta\chi^2 = 6.177^{**}$). In both cases the relationship is weaker when brand consciousness is high.

The moderator analysis also indicates that gender has a moderating effect. For women hedonic value is a weaker predictor of brand trust than for men ($\Delta\chi^2 = 7.376^{**}$) but brand trust is a stronger predictor of purchase loyalty ($\Delta\chi^2 = 3.182$, $p < .10$).

Age has no moderating effect on any of the relationships in the model.

Table 2

Results of moderator analyses

	Price consciousness		
	Low	High	Chi-square difference ($\Delta DF = 1$)
Hedonic value – brand trust	= .268 (t=6.375***)	= .099 (t=2.112*)	$\Delta\chi^2 = 7.818^{**}$
Utilitarian value – brand trust	= .069 (t=2.227*)	= .121 (t=3.077***)	$\Delta\chi^2 = 1.124$
Brand trust – attitudinal loyalty	= .542 (t=6.927***)	= .805 (t=8.395***)	$\Delta\chi^2 = 6.676^{**}$
Brand trust – purchase loyalty	= .879 (t=9.461***)	= 1.193 (t=12.895***)	$\Delta\chi^2 = .906$

$\Delta\chi^2$ for all parameters set equal across subgroups ($\Delta DF = 4$): 19.250***

	Involvement		
	Low	High	Chi-square difference ($\Delta DF = 1$)
Hedonic value – brand trust	= .061 (t=1.870 ⁺)	= .313 (t=5.853***)	$\Delta\chi^2 = 19.069^{***}$
Utilitarian value – brand trust	= .068 (t=2.350*)	= .023 (t=.709)	$\Delta\chi^2 = .1049$
Brand trust – attitudinal loyalty	= .471 (t=5.996***)	= .456 (t=4.954***)	$\Delta\chi^2 = .019$
Brand trust – purchase loyalty	= .896 (t=8.478***)	= .770 (t=7.480***)	$\Delta\chi^2 = .930$

$\Delta\chi^2$ for all parameters set equal across subgroups ($\Delta DF = 4$): 22.121***; ⁺ p < .10

	Brand Consciousness		
	Low	High	Chi-square difference ($\Delta DF = 1$)
Hedonic value – brand trust	= .167 (t=4.266***)	= .224 (t=4.573***)	$\Delta\chi^2 = .907$
Utilitarian value – brand trust	= .131 (t=3.875***)	= .020 (t=.547)	$\Delta\chi^2 = 5.191^{**}$
Brand trust – attitudinal loyalty	= .757 (t=8.585***)	= .485 (t=5.349***)	$\Delta\chi^2 = 6.177^{**}$
Brand trust – purchase loyalty	= .828 (t=8.933***)	= .695 (t=7.556***)	$\Delta\chi^2 = 1.358$

$\Delta\chi^2$ for all parameters set equal across subgroups ($\Delta DF = 4$): 11.739**

	Gender		
	Male	Female	Chi-square difference ($\Delta DF = 1$)
Hedonic value – brand trust	= .313 (t=5.844***)	= .139 (t=3.426***)	$\Delta\chi^2 = 7.376^{**}$
Utilitarian value – brand trust	= .068 (t=1.816 ⁺)	= .085 (t=2.414**)	$\Delta\chi^2 = .109$
Brand trust – attitudinal loyalty	= .696 (t=7.401***)	= .716 (t=8.334***)	$\Delta\chi^2 = .036$
Brand trust – purchase loyalty	= .706 (t=7.102***)	= .916 (t=10.094***)	$\Delta\chi^2 = 3.182^{+}$

$\Delta\chi^2$ for all parameters set equal across subgroups ($\Delta DF = 4$): 12.791**; ⁺ p < .10

	Age		
	Young	Old	Chi-square difference ($\Delta DF = 1$)
Hedonic value – brand trust	= .204 (t=4.509***)	= .193 (t=4.338***)	$\Delta\chi^2 = .088$
Utilitarian value – brand trust	= .105 (t=2.968**)	= .059 (t=1.750 ⁺)	$\Delta\chi^2 = .441$
Brand trust – attitudinal loyalty	= .743 (t=8.090***)	= .799 (t=6.278***)	$\Delta\chi^2 = 2.048$
Brand trust – purchase loyalty	= .758 (t=8.497***)	= .918 (t=7.108***)	$\Delta\chi^2 = .190$

$\Delta\chi^2$ for all parameters set equal across subgroups ($\Delta DF = 4$): 2.503n.s.

Discussion and Conclusion

Previous research has largely neglected the issue of moderator effects on the relationship between brand loyalty and its drivers (Homburg and Giering, 2001). This is especially true for empirical research on the role of brand trust and its antecedents in brand loyalty and brand equity processes (Delgado-Ballester and Munuera-Aleman, 2005). Against this background, we first investigated the influence of product value on brand trust and the impact of brand trust on brand loyalty for four consumer durables with high brand relevance. The results support the view that hedonic and utilitarian product value contribute to brand trust. Confirming Chaudhuri's and Holbrook's (2001) findings the results of the present study also suggest that brand trust is an important antecedent of both attitudinal and purchase loyalty as two different types of brand loyalty. Additionally, the moderating effect of selected demographic and psychographic characteristics on the product value – brand trust link and the brand trust – brand loyalty link was investigated. Gender, involvement, price consciousness, and brand consciousness are found to be important moderators of the product value – brand trust – brand loyalty chain.

For women hedonic value is significantly less important for the formation of brand trust than for men, indicating that for women other trust building factors such as product knowledge or interactions with sales personnel (Zeithaml, 1985) are more relevant. On the other hand, the impact of brand trust on purchase loyalty is significantly stronger for women, confirming the hypothesized greater role of trust in shaping women's purchase behavior.

Involvement has a positive moderating effect on the relationship between hedonic value and brand trust. This finding is consistent with the interpretation that individuals with higher levels of involvement for a certain product or a brand infer more emotional qualities and traits about the brand from their consumption experience with a higher effect on its trustworthy image (Delgado-Ballester and Munuera-Alemán, 1999). Interestingly, involvement did not moderate the relationships between brand trust and both attitudinal loyalty and purchase loyalty.

The empirical results for price consciousness show significant moderating effects both on the hedonic value – brand trust link and the brand trust – attitudinal link. As expected, the pleasure potential of a product has a weaker impact on brand trust for consumers with a high price consciousness. Furthermore, it can be assumed that consumers with high price consciousness are more reluctant in developing brand trust as they focus more on low prices in their purchase decisions. However, if a highly price conscious consumer finally has built trust in a specific brand, brand trust might be a stronger predictor for attitudinal (and purchase) loyalty than for less price conscious individuals.

The findings also show the hypothesized moderating effect of brand consciousness. Utilitarian value has a significantly lower impact on brand trust for highly brand conscious consumers. Consumers with high brand consciousness can be expected to develop brand trust more easily than consumers with low brand consciousness, what might result in a weaker contribution of brand trust to attitudinal (and purchase) loyalty.

No evidence for moderating effects is found for age.

For customers, brand relationships are often circumstantial and relatively unimportant, but for the brands respectively the companies they are representing, such bonds can significantly impact the bottom line (Fournier, 1998; Morgan and Hunt, 1999). Consumers' brand loyalty is strategically important for companies to obtain a sustainable competitive advantage, as it gives companies some protection from competition and increases their control in planning their marketing programmes (Gounaris and Stathakopoulous, 2004). In the relationship marketing literature a number of different strategies and instruments are recommended in order to enhance consumer loyalty. However, the results of this study also encourage managers to pay equal or even more attention to strategies and measures that primarily help to build brand trust, such as corporate identity strategies, personal communication, and merchandising. Demonstrating competence, credibility and benevolence as important dimensions of trust should result in a more personal attachment and commitment of customers.

In the present study, brand trust explained 31% of the variance in purchase loyalty and 38% of the variance in attitudinal loyalty. Thus, we recognize that there are other determinants of brand trust and brand loyalty that could be included in more comprehensive models with possibly higher explanatory power. Beyond customer satisfaction, risk aversion, variety seeking and personality traits such as openness and extraversion should be examined for their potential relevance to brand trust, and brand loyalty.

Overall, the results of this study provide encouraging empirical support both for the theory based product value – brand trust – brand loyalty chain as well as for the hypothesized moderating effects on the relationships between brand trust and product value as one of its antecedents, and brand loyalty as one of its outcomes. Hence, this research makes a significant contribution towards a better understanding of the relationships between product value, brand trust, and brand loyalty. Future research should build upon the findings of this study and attempt to provide further insight into the nature of these relationships.

References

1. Alford, Bruce, L. and Biswas, Abhijit (2002), "The effects of discount level on price consciousness and sale proneness on consumers' price perception and behavioural intention," *Journal of Business Research*, 55, 775-783.
2. Ambler, Tim (1997), "How much brand equity is explained by trust?", *Management Decision*, 35 (4), 283-292.
3. Bakewell, Cathy and Mitchell, Vincent-Wayne (2003), "Generation Y female consumer decision-making styles", *International Journal of Retail & Distribution Management*, 31 (2), 95-106.
4. Baron R.M. Kenny D.A. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 1986; 51 (6): 1173-1182.
5. Batra, R., Ahtola, O.T. 1990, "Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes", *Marketing Letters*, 2 (2), 159-170.
6. Bennett, R., Härtel, C.E., McColl-Kennedy, J.R. (2005), "Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting", 02-314R, *Industrial Marketing Management*, 34, 97-107.
7. Blattberg, Robert C. and Neslin, Scott A. (1990), "Sales Promotion: Concepts, Methods, and Strategies, 1st ed., Englewood Cliffs, NJ: Prentice Hall.
8. Chaudhuri A. Holbrook M.B. The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing* 2001; 65 (April): 81-93.
9. Chen, S.C., Dhillon, G.S. (2003), "Interpreting dimensions of consumer trust in e-commerce", *Information Technology and Management*, 4, 203-318.
10. Corritore, C.L., Kracher, B., Wiedenbeck, S. (2003), "Online trust : Concepts, evolving themes, a model", *International Journal of Human Computer Studies*, 58, 737-758.
11. D'Astous, A. and Gargouri, E. (2001), "Consumer evaluations of brand imitations", *European Journal of Marketing*, 35, 153-167.
12. Delgado-Ballester, Elena and José Luis Munuera-Alemán (1999), "Brand trust in the context of consumer loyalty", *European Journal of Marketing*, 35 (11/12), 1238-58.
13. Delgado-Ballester, Elena and José Luis Munuera-Alemán (2005), "Does brand trust matter to brand equity?", *Journal of Product & Brand Management*, 14 (3), 187-196.
14. Dick, Alan S. and Kunal Basu (1994), "Customer loyalty: toward an integrated conceptual framework", *Journal of the Academy of Marketing Science*, 22 (Spring), 99-113.
15. Erickson, Gary, M. and Johansson, Johny, K. (1985), "The Role of Price in Multi-Attribute Product Evaluations", *Journal of Consumer Research*, 12 (September), 195-199.
16. Fischer, Marc, Heribert Meffert and Jesko Perrey (2004), "Markenpolitik: Ist sie für jedes Unternehmen gleichermaßen relevant?", *Die Betriebswirtschaft*, 64 (3), 333-356.
17. Fornell C. Larcker D.F. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 1981; 18 (February): 39-50.

18. Fournier, S. (1998), "Consumers and their brands: deviations from the Dirichlet model for repeat purchasing", *Journal of Marketing Research*, 30 (November), 478-93.
19. Gounaris, Spiros, and Vlasis, Stathakopoulos (2004), "Antecedents and consequences of brand loyalty: An empirical study", *Journal of Brand Management*, 11 (4), 283-206.
20. Gundlach, Gregory T., S. Achrol Ravi, and John T. Mentzer (1995), "The structure of commitment in exchange," *Journal of Marketing*, 59 (January), 78-92.
21. Holbrook, Morris B. and Hirschmann, Elisabeth C. (1982), "The experiential aspects of consumption: Consumer fantasies, feelings, and fun", *Journal of Consumer Research*, 9 (September), 132-140.
22. Homburg C. Giering A. Personal characteristics as moderators of the relationship between customer satisfaction and loyalty - An empirical analysis. *Psychology & Marketing* 2001; 18 (1): 43-66.
23. Hu L.-T., Bentler P.M. Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling: A Multidisciplinary Journal* 1999; 6 (1): 1-55.
24. Johnson, D., Grayson, K. (2005), "Cognitive and affective trust in service relationships", *Journal of Business Research*, 58, 500-507.
25. Johnson-George, C., Swap, W.C. (1982), "Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other", *Journal of Personality and Social Psychology*, 43 (6), 1306-1317.
26. Kapferer, J.N. and Laurent, G. (1985), "Brand sensitivity: a new concept for brand management", *Proceedings of the Annual Conference of the European Marketing Academy*.
27. Kapferer, J.N. and Laurent, G. (1993), "Further Evidence on the Consumer Involvement Profile: Five Antecedents of Involvement", *Psychology and Marketing*, 10 (4), 347-357.
28. Knox, S., D. Walker, and Marshall, C. (1993), "Measuring consumer involvement with grocery brands: model validation and scale-reliability test procedures", *Journal of Marketing Management*, 10 (1-3), 147-152.
29. Lau Geok Theng and Sook Han Lee (1999), "Consumers' trust in a brand and the link to brand loyalty", *Journal of Market-Focused Management*, 4, 341-370.
30. Lewis, J.D., Weigert, A. (1985), "Trust as a social reality", *Social Forces*, 63, 967-985.
31. Lichtenstein, Donald R., Bloch, Peter H. and Black, William.C. (1988), "Correlates of Price Acceptability", *Journal of Consumer Research*, 15 (September), 243-252.
32. Lichtenstein, Donald, R., Burton, Scot and Netemeyer, Richard G. (1997), "An Examination of Deal Proneness Across Sales Promotion Types: A Consumer Segmentation Perspective", *Journal of Retailing*, 73 (2), 283-297.
33. Lichtenstein, Donald, R., Netemeyer, Richard, G. and Burton, Scot (1990), "Distinguishing Coupon Proneness From Value Consciousness: An Acquisition-Transaction Utility Theory Perspective", *Journal of Marketing*, 54 (July), 54-67.
34. Lichtenstein, Donald, R., Ridgway, Nancy, M. and Netemeyer, Richard, G. (1993), "Price Perceptions and Consumer Shopping Behavior: A Field Study", *Journal of Marketing Research*, 30 (May), 234-245.
35. Lysonski, Steven, Durvasula, Srine and Totos, Yiorgos (1996), "Consumer decision-making styles: a multi-country investigation", *European Journal of Marketing*, 30 (12), 10-21.
36. Manning, Kenneth C., Sprott, David E., Miyazaki, Anthony D. (2003), "Unit price usage knowledge: Conceptualization and empirical assessment", *Journal of Business Research*, 56, 367-377.
37. Mano, Haim and Oliver, Richard, L. (1993), "Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction", *Journal of Consumer Research*, 20 (December), 451-466.
38. Miyazaki, Anthony, D., Sprott, David E. and Manning, Kenneth C. (2000), "Unit Prices on Retail Shelf Labels: An Assessment of Information Prominence", *Journal of Retailing*, 76 (1), 93-112..

39. Monroe, Kent B. and Petroshius, Susan, M. (1981), "Buyers' Perceptions of Price: An Update of the Evidence," *Perspectives in Consumer Behavior*, eds. Glenview, IL: Scott, Foresman and Company, 43-55.
40. Morgan, Robert M. and Hunt, Shelby D. (1994), "The commitment-trust theory of relationship marketing", *Journal of Marketing*, 58 (July), 20-38.
41. Riegelsberger, J., Sasse, M.A., McCarthy, J.D. (2005), "The mechanics of trust: A framework for research and design", *International Journal of Human-Computer Studies*, 6, 381-422.
42. Rao, Akshay and Bergen, Mark (1992), "Price premium variations as a consequence of buyers' lack of information", *Journal of Consumer Research*, 19 (3), 412-24.
43. Rothenberger, Sandra (2005), "Antezendezen und Konsequenzen der Preiszufriedenheit", Wiesbaden: Gabler.
44. Schafer J.L. Graham J.W. Missing data: Our view of the state of the art. *Psychological Methods* 2002; 7 (2): 147-177.
45. Slama, M.E., Tashlian, A. (1985), "Selected socio-economic and demographic characteristics associated with purchasing involvement", *Journal of Marketing*, 49, 72-82.
46. Sheth, J.N. and Parvatiyar, A. (1995), "Relationship marketing in consumer markets: antecedents and consequences", *Journal of the Academy of Marketing Science*, 23 (4), 255-271.
47. Shim, S., Snyder, L. and Gehrt, K.C. (1995), "Parents' perception regarding children's use of clothing evaluative criteria: an exploratory study from the consumer sozialization process perspective, *Advances in Consumer Research*, 22, 628-632.
48. Simon, H. (2004), "Preismanagement – Analyse, Strategie, Umsetzung", Wiesbaden: Gabler.
49. Sinha, Indrahit and Batra, Rajeev, (1999) "The effect of consumer price consciousness on private label purchase", *International Journal of Research in Marketing*, 16, 237-251.
50. Sproles, G.B. (1985), "From perfectionism to daddism: Measuring consumers' decision-making styles", *Proceedings American Council on Consumer Interest Conference*, Columbia, OH, 79-85.
51. Sproles, G.B. and Kendall, E.L. (1986), "A methodology for profiling consumers' decision-making styles", *Journal of Consumer Affairs* 20 (2), 267-279.
52. Sternquist, Brenda, Byun, Sang-Eun and Jin, Byoungcho (2004), "The Dimensionality of Price Perceptions: A Cross-Cultural Comparison of Asian Consumers", *The International Review of Retail, Distribution and Consumer Research*, 14 (January), 83-100.
53. Swaminathan, Srinivasan and Bawa, Kapil (2005), "Category-specific coupon proneness: The impact of individual characteristics and category-specific variables", *Journal of Retailing*, 81 (3), 205-214.
54. Tabachnik B.G. Fidell L.S. *Using Multivariate Statistics*. New York: Harper Collins, 1996.
55. Tellis, Gerard, J. and Gaeth, Gary, J. (1990), "Best Value, Price-Seeking, and Price Aversion: The Impact of Information and Learning on Consumer Choices", *Journal of Marketing*, 54 (April), 34-45.
56. Urbany, Joel, E., Dickson, Peter, R. and Kalapurakal, Rosemary (1996), "Price Search in the Retail Grocery Market", *Journal of Marketing*, 60 (April), 91-104.
57. Venkatesh, V., Morris, M.G., Ackerman, P.L. (2000), "A longitudinal field investigation of gender differences in individual technology adoption decision-making processes", *Organizational Behavior and Human Decision Processes*, 83 (1), 33-60.
58. Walsh, Gianfranco and Hennig-Thurau, Thorsten, (2001), "Der Kaufentscheidungsstil von Konsumenten als Grundlage der Marktsegmentierung", *Marketing ZFP*, (4), 223-235.
59. Walsh, Gianfranco, Mitchell, Vincent-Wayne and Hennig-Thurau, Thorsten, (2001), "German Consumer Decision-Making Styles", *The Journal of Consumer Affairs*, 35 (2001), 1, 73-95.
60. Wirtz M. Über das Problem fehlender Werte: Wie der Einfluss fehlender Informationen auf Analyseergebnisse entdeckt und reduziert werden kann. *Rehabilitation* 2004; 43: 1-7.
61. Zeithaml, V.A. (1985), "The new demographics and market fragmentation", *Journal of Marketing*, 49, 64-75.